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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/998,105      | 11/30/2001  | Cornelius Peter      | TRW (AEC) 5987      | 4403             |

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11/20/2002

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EXAMINER

BUI, HUNG S

ART UNIT

PAPER NUMBER

2841

DATE MAILED: 11/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/998,105

Applicant(s)

PETER, CORNELIUS

Examiner

Hung S Bui

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.                      6) ☐ Other: .

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the housing body encapsulating the base plate must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, line 6, applicant should clarify what is intended by and the specific structure of the "encapsulation of the base plate." In lines 8-9, applicant should clarify the structure of the "cantilevered attachment section."

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 5-6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art of figure 2, of Du Bois et al. [US 4,518,982] (hereinafter Du Bois) in view of Collumeau [US 4,510,677].

Regarding claims 1-3, Du Bois discloses a housing (34) for an electronic device comprising:

- a stamped metallic base plate (21); and
- an injection molded parallelepipedal housing body (figure 2) covering the base plate.

Du Bois discloses the instant claimed invention except for the housing encapsulating the base plate and a projection extending out of the housing body with a "cantilevered" attachment portion.

Collumeau discloses a housing (figure 3) encapsulating at least one cantilevered contact portions (20-23) and at least one attachment portion (1).

It would have been obvious to a person having ordinary skill in the art at the time invention was made to use the housing body design of Collumeau for the housing body of Du Bois, for the purpose of facilitating attachment of the housing.

Regarding claims 5-6, Du Bois discloses soldering pins (29, 30) stamped from and extending perpendicularly from the base plate (figure 2).

Regarding claim 11, Du Bois, as modified, disclose the instant claimed invention except for the specific component connected to the housing.

The specific component connected to the housing would have an obvious design consideration based on the intended application for the housing/connector device.

6. Claims 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Du Bois, as modified, as applied to claim 1 above, and further in view of Verma [US 5,872,332].

Regarding claim 4, Du Bois, as modified, disclose the instant claimed invention except for the contact portion having a protective sleeve integrally molded with the housing body.

Verma discloses a molded housing (10) having contacts (32) with a protective sleeve (34) extending from the housing thereabout.

It would have been obvious to a person having ordinary skill in the art at the time invention was made to use the protective sleeve design of Verma in Du Bois, as modified, for the purpose of protecting the contacts.

Regarding claim 7, Du Bois, as modified, disclose the instant claimed invention except for the housing body including integrally molded internal support structures for a printed circuit board.

Verma discloses a molded housing body (10) having integrally molded internal support structures (22) for a printed circuit board.

It would have been obvious to a person having ordinary skill in the art at the time invention was made to include integrally molded internal support structures for a printed circuit board in the housing body of Du Bois, as modified, as suggested by Verma, for the purpose of providing support for a circuit board.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Du Bois, as modified, as applied to claim 1 above, and further in view of Tsai [US 6,347,958].

Regarding claim 8, Du Bois, as modified, disclose the instant claimed invention except for the housing having an opening opposite to the base plate with a removable cover mountable thereon.

Tsai discloses a housing for a circuit board (10) having an open portion (figure 2) with a removable cover (30).

It would have been obvious to a person having ordinary skill in the art at the time invention was made to have an open portion opposite to the base plate with a removable cover in Du Bois, as modified, as suggested by Tsai, for the purpose of facilitating access to the interior of the housing.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Du Bois, as modified, as applied to claim 1 above, and further in view of Flickinger [US 4,924,152].

Regarding claim 9, Du Bois, as modified, disclose the instant claimed invention except for the attachment portion including at least one embossed reinforcement bead.

Flickinger discloses a housing (10) having an attachment portion (157, 158) including a reinforcement bead (152).

It would have been obvious to a person having ordinary skill in the art at the time invention was made to add the reinforcement bead onto the attachment portion of Du Bois, as modified, as suggested by Flickinger, for the purpose of strengthening the attachment portion.

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Du Bois, as modified, as applied to claim 1 above, and further in view of Davidson [US 4,782,240].

Regarding claim 10, Du Bois, as modified, disclose the instant claimed invention except for the attachment section having at least one attachment hole for the passage of the stud which is attached to a cell terminal of a lead accumulator.

Davidson discloses a housing (10) having an attachment section (24) having at least one attachment hole (figure 1) for the passage of a stud (25) which is attached to a cell terminal of a lead accumulator (26).

It would have been obvious to a person having ordinary skill in the art at the time invention was made to use attachment design of Davidson for the attachment portion of Du Bois, as modified, for the purpose of facilitating attachment of the housing body to a battery/lead accumulator.

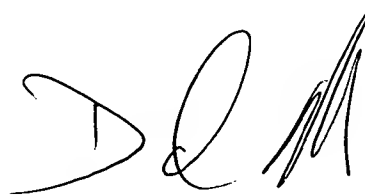
***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung S Bui whose telephone number is (703) 305-8024. The examiner can normally be reached on Monday-Friday 8:30AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David S. Martin can be reached on (703) 308-3121. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-0956.

HB  
11/15/02

A handwritten signature in black ink, appearing to read 'DLM', is positioned above the printed name and title of the supervisor.

**DAVID MARTIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800**